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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/059,483

01/29/2002

Jae-Young Choi

8045-32  
(PX1438-US/SSD)

5894

7590

03/31/2003

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EXAMINER

TRINH, HOA B

ART UNIT

PAPER NUMBER

2814

DATE MAILED: 03/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/059,483

Applicant(s)

CHOI ET AL.

Examiner

Vikki H Trinh

Art Unit

2814

-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election with traverse of Group II, claims 6-14, in Paper No. 4 is acknowledged. The traversal is on the ground(s) that it would not be serious burdensome for the examiner to examine the groups together. The examiner has considered applicant's argument. Therefore the examiner will examine all of the claims in the present application in this Office Action.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1-14 are rejected under 35 U.S.C. 102(a) as being anticipated by Admitted Prior Art (APA); specification, pages 2-3, 8-9, and figures 1-2.

With respect to claims 1, 6, 12, APA discloses a method of performing wafer processing having the steps of: aligning 104 and photo exposing with the stepper 20; coating 102 and developing 106 the wafer with the spinner 10; automatically measuring 112 an overlay accuracy of the wafer with the overlay measurement device 30 after the wafer developing step is completed, wherein the overlay measurement device 30 is in-line connected to the spinner 10. See APA, figures 1-2.

As to claims 7, 13, the diameter of the wafer is at least 12 inches. See Specification, page 2, line 21.

Art Unit: 2814

As to claims 2, 8, the step of measuring the overlay accuracy of the wafer comprises the step of in-line connecting the overlay measurement device to an index arm of the spinner. (The examiner notes that the index arm is part of the spinner which functions as a transferring unit). See APA, specification, page 8, lines 13-21, and figure 1.

As to claims 3-4,9, when transferring the wafer from the index arm of the spinner to the overlay measurement device, it is inherent that the transferring step includes the loading or unloading of the wafer by bordering the input and output of the spinner and the overlay measurement. See figures 1-2.

As to claim 5, at step 112, a faulty wafer would be rejected to a port during overlay measurement. See figure 2.

As to claim 10, the method includes the step of receiving the wafer from the spinner. See figure 1.

As to claims 11, 14, the step of overlaying 112 includes rejecting a faulty wafer. See figure 2.

### **Conclusion**

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

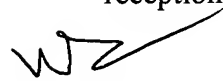
Yasuda (6,092,031) discloses a method of aligning the wafer. See entire document.

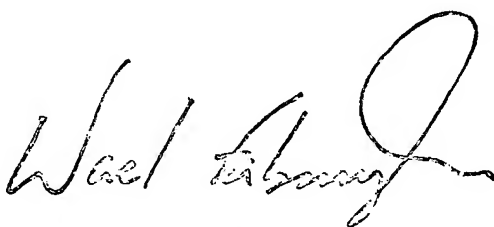
Ueno (5,879,843) discloses a method of reducing displacement of the semiconductor device. See entire document.

Ziger et al. (6,465,322) discloses a method of determining the alignment of the wafer. See entire document.

Art Unit: 2814

2. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Vikki Trinh whose telephone number is (703) 308-8238. The Examiner can normally be reached Mon-Tuesday, Thurs-Friday, 7:30 AM - 6:00 PM Eastern Time. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Mr. Wael Fahmy, can be reached at (703) 308-4918. General inquiries relating to the status of this application should be directed to the Group receptionist at (703) 308-0858. The fax number is (703) 308-2708.

  
Vikki Trinh,  
Patent Examiner  
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